REMARKS

Preliminary Amendment

The applicant notes that the Pre-Grant Publication of the application, No. 2007/0130858, while it contained the preliminary amendments to the claims, did not include the preliminary amendments to the specification. The applicant respectfully requests that the Office confirm that these amendments were entered.

Double Patenting

The Office rejected claims 1-29 under the judicially created doctrine of obviousness-type double patenting over Co-pending US Application No. 10/595697. Applicant agrees to a terminal disclaimer only to advance processing of the present application conditioned upon the grant of a patent or patents based upon said US Application No. 10/595697, and states herein that the cited issued U.S. Patent 6,459,842 and the above-referenced application share common ownership.

A rejection based on a non-statutory type of double patenting is obviated by filing a terminal disclaimer in the application or proceeding in which the rejection is made. In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); In re Knohl, 386 F.2d 476, 155 USPQ 586 (CCPA 1967); and In re Griswold, 365 F.2d 834, 150 USPQ 804 (CCPA 1966)

Claim Rejections – 35 USC § 103

The Office has quoted the statute from 35 USC 103(a), which is referenced herein. The Office has rejected claim 1-6, 9-10 12-13 and 25-29 as being unpatentable over US Pat. No. 6,151,854 issued to Gutjahr in view of European Patent No. 0386324 of Siplast GMBH (a translation of which is submitted in an accompanying information disclosure statement).

Applicant has carefully considered the Office rejections and respectfully submits that the amended claims, as supported by the arguments herein, are distinguishable from the cited reference.

According to the MPEP §2143.01, "[o]bviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found in either the references themselves or in the knowledge generally available to one of ordinary skill in the art."

A useful presentation for the proper standard for determining obviousness under 35 USC §103(a) can be illustrated as follows:

1. Determining the scope and contents of the prior art;
2. Ascertaining the differences between the prior art and the claims at issue;
3. Resolving the level of ordinary skill in the pertinent art; and
4. Considering objective evidence present in the application indicating obviousness or unobviousness.

In contrast to the claimed invention, the '854 reference fails to provide a sealing layer incorporated in the layer construction of the '854 reference. In column 1 lines 30 – 37 of '854 reference is stated that the substrate on which the tiles are to be laid is sealed by alternative seals such as slurries or liquid films against penetration of water. In contrast to the claimed invention there is no disclosed component in the layer construction of the '854 reference which itself has water-resistant properties.

This failing of the '854 reference necessitates a completely different layer construction and a very expensive and time-consuming method for installing the layer construction of the '854 reference. Separate sealing of the substrate by two installers are required, one who seals the underground and one who lays the layer construction. In between of these two different operations the separate sealing layer must dry introducing several days of an interruption. This disadvantage of the system according to the '854 reference can also not be overcome by

combining the upper layers of the '324 reference because there is no sealing functions of these layers.

In further contrast, the '854 reference does not show all functional layers needed for a correct and long lasting function of the layer construction according to the pre-sent invention. In the present invention all layers of the system are laid in only one operation to the ground and consequently no interruptions or additional drying times are introduced. Only one installer is required, and no preliminary preparation of the ground is required.

In further contrast to the claimed invention, the '854 reference is disclosed as being laid loosely on the ground because there is no functional layer for securing the nethermost layer to the ground. In column 1 in line 44 – 53 it is expressly said that the "profiled web is placed loosely on the upper surface of the sealed support plate" and therefore "cannot transmit any shear forces to damage the sealing layer". As a result, such a layer system can only be laid on horizontal surfaces and cannot be used for vertical or any non-horizontal placement.

Unlike the claimed invention, the '854 reference discloses only the construction of the lattice-type structural element for drainage and anchoring purposes. In the '854 reference this element is a foil which is formed with recesses in which the mortar for fixing the tiles can enter from up-side and which can be formed with walls to which the mortar can fasten itself. In these walls and at the bottom of these recesses openings are left for guiding water coming from upside of the tiles to the sealed ground. The formation of the water guiding shapes is geometrically defined.

In contrast to the cited '854 reference, the claimed invention discloses a lattice-type structural element for guiding water that is formed by a plurality of rods laid in the form of a lattice and fastened together. Between each adjacent rods water can flow and space is provided for guiding water simultaneously. No connecting channels are provided for ensuring a balance of water flow between the individual channels of the '854 reference.

Furthermore, the channels disposed in the foils according to the '854 reference, which are opened to the top of the layer construction, are completely filled with the mortar which fixes the tiles. Therefore only a low percentage of the area of the layers, in which the channels are opened to the downwards sealing layer can guide water, whereas in the present invention nearly the complete area of the layer system beneath the anchoring layer can guide water.

In the '854 reference the folded or molded foil has a double function: guiding water in the channels opened to the ground and fastening the mortar in the channels opened to the upper side, into which the mortar is filled in during laying the tiles. Neither of these two functions can be optimized and the drainage system according to the '854 reference shows the above described disadvantages. Also because of the geometrically fixed shape of the channels the fastening of the mortar in the channels is not very good. The applicant draws the Offices attention to the cross-sections of the channels of the '854 reference that are illustrated in Figure 3 and Figure 4. The mortar itself will cement into the openings in the channel walls and close these openings, occluding water flow.

The Office seeks to combine the teachings of the '854 reference with those of the '325 reference. For a better understanding of the '324 reference the applicant provides a translation of relevant portions of the German language European Patent.

As noted above, the '854 reference fails to provide a layer construction with a decoupling and insulation system instead providing only a bonding agent for laying tiles in a thin bed without any decoupling feature. The plate according to the '324 reference therefore comprises a cold-setting bituminous layer (1) whose underside durably adheres to the substrate (4, 5) and whose top side is coated with a further layer with a relief structure. This further layer is made of two layer portions durably connected together, the lower portion made of a fleece or a fabric or a foil and applied as a coating to the top side of the bituminous layer while the upper layer portion comprises a mesh. Such a plate is used for insulating walls in a bath or the like against penetration of water and to ensure the safe fastening of the tiles to the wall. The layer with a

relief structure is made for ensuring a better connection between tiles and underground because on the bituminous layer the tiles cannot be fastened directly.

There is no suggestion to use such a wall plate (see Figure 2) as a plate for laying on the ground where a decoupling function may be needed. A decoupling function used with a plate according to the '324 reference would lead to coming loose of the plate and the connected tiles falling from the wall. So the **durable** connection between the wall and the plate must be ensured by means of the cold-setting bonding and therefore there is no possibility to use it as a de-coupling plate in the sense of the patent application.

If one examines the layer construction described in the '324 reference, one would appreciate that one of ordinary skill in the art will find that the cited reference is readily distinguishable from the cited reference. On top of the sealing layer, a layer 3a composed of either a non-woven or woven fabric or a film is disposed, having only the task of durably fastening to the bituminous layer 1 and thereby ensuring a strong contact between the bituminous sealing layer 1 and the tiles respective layer 3b. There is no other structure provided to form a strong fastened base for the lattice type reinforcement layer 3b which itself is fastened only to the layer 3a and not to the bituminous sealing layer 1. The layer 3a contacts the bituminous sealing layer 1 on nearly its whole lower surface and the reinforcement layer 3b is fastened to the layer 3a only at several points so that the filler material can wrap around the lattice structure of the reinforcement layer 3b. The layer 3a itself cannot be used for ensuring the strong contact between the filler material and the layer construction because the layer has no space for being filled by the filler material.

The missing reinforcement function of layer 3b can be seen in Figure 2 of the '324 reference where is shown that the filler material does not fill the holes of the layer 3b since in the cross section of Figure 2 the lattice elements are only on the very back side of the thick layer formed by the filler material. This, simply cannot be understood in a way that the filler material is **incorporated** in the anchoring layer according to the invention.

In contrast to the cited references, the upper layers of the claimed invention provide a very stiff layer construction for laying tiles that has both a sealing, a drainage and a decoupling function. The stiffness is mainly determined by providing a layer that, as claimed, can incorporate a sufficient amount of the filler material. In particular, stiffness is provided by the anchoring layer that is disposed on top and the reinforcing layer that is laid on top of and secured to it, it is ensured that joint mortar that is applied to the top face bonds completely with the layer system, thereby ensuring appropriate load-bearing capacity for the layer system. The lattice-type structural element permits particularly simple construction of the anchoring layer that essentially determines the thickness of the decoupling and sealing system. The sealing layer ensures appropriate liquid-impermeable sealing against the substratum at the installation site, and also ensures mechanical decoupling in the case of floating installation.

As noted in the description of the present invention (paragraph [0024] of the published application) the *"significant advantage for the utilization properties of the decoupling and sealing system according to the present invention that, after the installation of the filler material, the anchoring layer is essentially completely filled with filler material and the reinforcing layer that is embedded in the hardened filler material performs a stiffening and reinforcing function for dispersing mechanical loads that are introduced from above, with the result that load dispersal is possible through significantly greater layer thicknesses than is the case with known decoupling and sealing systems since, in addition, the whole layer thickness of the anchoring layer helps to bear the loads and, at the same time, is reinforced by the reinforcing layer."*

The '324 reference, therefore, cannot be understood in the way the Office seems to derive only from the figures of the German language document.

The applicant respectfully submits that at least for the foregoing reasons the cited references, either alone or combination fail to disclose the claimed invention of claim 1, and of those claims dependant therefrom. The applicant respectfully requests that the Office withdraw its rejection of claims 1-6, 9-10 12-13 and 25-29.

The Office has rejected claims 7 and 11 under 35 U.S.C. 103(a) as being unpatentable over the '854 reference in view of the '324 reference as applied to claim 1 above and further in view of US Patent No. 6,171,015 issued to Barth et al. The applicant submits, and the Office fails to allege to the contrary, that the '015 reference does not supply those inadequacies of the cited references discussed at length above. As claims 7 and 11 also depend from claim 1, the applicant respectfully requests that the Office withdraw its rejection of claims 7 and 11.

The Office has rejected claims 8 and 20-24 under 35 U.S.C. 103(a) as being unpatentable the '854 reference in view of the '324 reference as applied to claim 1 above, and further in view of French Patent No. 2774715 of Nortene Technologies. The applicant submits, and the Office fails to allege to the contrary, that the '715 reference does not supply those inadequacies of the cited references discussed at length above. As claims 8 and 20-24 also depend from claim 1, the applicant respectfully requests that the Office withdraw its rejection of claims 8 and 20-24.

The Office has rejected claim 15 under 35 U.S.C. 103(a) as being unpatentable over Gutjahr (US 6151854) in view of Siplast GMBH (EP 0386324) as applied to claim 1 above, and further in view of Nakazawa (US 5238721). The applicant submits, and the Office fails to allege to the contrary, that the '721 reference does not supply those inadequacies of the cited references discussed at length above. As claim 15 also depend from claim 1, the applicant respectfully requests that the Office withdraw its rejection of claim 15.

Applicant believes the above amendments and remarks to be fully responsive to the Office Action, thereby placing this application in condition for allowance. No new matter is added. Applicant requests speedy reconsideration, and further requests that Examiner contact its attorney by telephone, facsimile, or email for quickest resolution, if there are any remaining issues.

Respectfully submitted,

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